

**NOTES ON *DOLICHOPUS*, *ALLOHERCOSTOMUS*, AND  
*PHALACROSOMA* FROM NEPAL  
(DIPTERA: DOLICHOPODIDAE)<sup>1</sup>**

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ABSTRACT: One species is described as new to science: *Dolichopus nepalensis* sp. nov. Two species are recorded from Nepal for the first time: *Allohercostomus rotundatus* (Yang and Saigusa, 1999), *Phalacrosoma amoenum* Becker, 1922.

KEY WORDS: Diptera, Dolichopodidae, *Dolichopus*, *Allohercostomus*, *Phalacrosoma*, new species, Nepal.

The fauna of Dolichopodidae from Nepal is not well known. The major studies on Dolichopodidae from Nepal were made by Hollis (1964) and Yang, Saigusa and Masunaga (2001, 2002, 2003). In the present paper, the following three genera and five species of the subfamily Dolichopodinae from Nepal are listed: *Dolichopus* (two species), *Allohercostomus* (two species), and *Phalacrosoma* (one species). One species is described as new to science, *Dolichopus nepalensis*, and two species are recorded from Nepal for the first time.

The types of the new species are deposited in the Biosystematics Laboratory of Kyushu University, Fukuoka, Japan. The following abbreviations are used: acr-acrostichal, ad-anterodorsal, apv-apicoventral, av-anterovenral, d-dorsal, dc-dorsocentral, LI-fore leg, LII-mid leg, LIII-hind leg, npl-notopleural, pd-posterodorsal, pv-posterovenral, v-ventral.

**Genus *Dolichopus* Latreille, 1796**

The species of the genus *Dolichopus* from the Oriental region were reviewed by Olejníček (2002). One species was known from Nepal: *Dolichopus exsul* Aldrich, 1922 (Hollis, 1964; Dyte, 1975). Here one new species is added to the fauna of Nepal.

***Dolichopus exsul* Aldrich, 1922**

*Dolichopus exsul* Aldrich, 1922. Proc. U.S. National Museum 61(25): 15. Type locality: Hawaii.

Distribution: Nepal, India, China (Jiangsu, Taiwan), Hawaii.

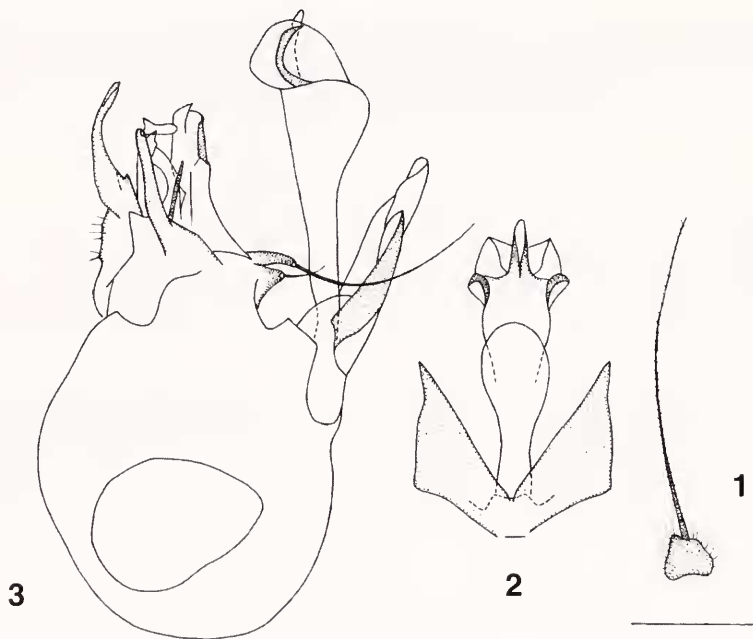
Remarks: Hollis (1964) recorded this species from Nepal.

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Figs. 1-3. *Dolichopus nepalensis*, n. sp. (male). 1, Antenna (excluding scape), lateral view; 2, genitalia, lateral view; 3, apical genital processes, lateral view. Scale 0.25 mm.

***Dolichopus nepalensis* Yang, Saigusa and Masunaga, NEW SPECIES**  
(Figs. 1-3)

**Diagnosis:** Antenna wholly black; first flagellomere as long as wide. All coxae (except narrow apex) black. Hypandrium hook-like apically.

**Description: Male.** Body length 4.5-4.9 mm, wing length 4.7-5.1 mm.

Head metallic green with gray brown pollen; lower occiput with pale gray pollen; frons subshiny with thin pollen; face distinctly wider than first flagellomere, with dense brownish yellow pollen, clypeus with dense pale gray pollen. Hairs and bristles on head black; middle and lower postocular bristles (including ventral hairs) pale. Antenna wholly black; first flagellomere rather small, as long as wide, obtuse apically; arista subapical, black, with very short hairs, with basal segment 0.6 times as long as apical segment. Proboscis dark brown with black hairs; palpus brownish yellow, with black hairs and 1 black apical bristle.

Thorax metallic green with pale gray pollen; mesonotum (except notopleural area) and scutellum subshiny with gray brown pollen. Hairs and bristles on thorax black; 6 strong dc (5th pair of dc slightly convergent), 8-9 irregularly paired acr short and hair-like; scutellum with pale discal and marginal hairs. Propleuron pale haired, with 1 black bristle on lower portion. Pteropleuron with group of pale hairs in front of metaspiracle; metapleuron with some pale hairs on antero-lower corner. Legs yellow; all coxae (except narrow apex) black; fore and mid tarsi from tip of basotarsomere onward black, apex of hind tibia and entire hind tarsus black. Hind tibia slightly thickened apically. Hairs and bristles on legs black, coxae with some pale hairs basally; fore coxa with 5-6 bristles, mid and hind coxae each with 1 outer bristle; mid and hind femora with 1 preapical bristle. Fore tibia with 3ad, 2

pd and 2 pv, apically with 2 bristles and 1 short apv (slightly longer than tibia thickness); mid tibia with 4 ad, 2 pd and 1 av, apically with 5 bristles; hind tibia with 5 ad, 3 pd and 3 av, apically with 3 bristles. Tarsomere 5 slightly thickened with distinct dorsal and lateral hairs. Hind basotarsomere with 2 ad and 4-5 v. Relative lengths of tibia and 5 tarsomeres L1 2.8 : 1.4 : 0.6 : 0.5 : 0.3 : 0.45; LII 3.9 : 2.0 : 1.1 : 0.9 : 0.6 : 0.5; LIII 4.2 : 1.85 : 1.85 : 1.3 : 0.85 : 0.6. Wing nearly hyaline; veins dark brown, costal callus punctiform, M with a weak Z-bend but without rudimentary M2; CuAx ratio 0.65. Calyptera yellow with black hairs. Halter yellow with brown base.

Abdomen metallic green with pale gray pollen; cercus yellow with black margin. Hairs and bristles on abdomen black. Male genitalia (Figs. 2-3): Epandrium distinctly longer than wide, with rather wide outer lateral lobe bearing 2 short spine-like apical bristles, and narrow inner lateral lobe finger-like; cercus nearly quadrate with distinct marginal denticles; hypandrium hook-like apically.

**Female.** Body length 4.8-5.3 mm, wing length 5.0-5.3 mm. Similar to male, but face distinctly wider than first flagellomere.

**Type Data:** Holotype, male. Nepal, Topke Gola (3700 m), 1972. VII. 8, J. Emoto, deposited in the Biosystematics Laboratory of Kyushu University, Fukuoka, Japan. Paratypes, 4 males, 3 females, same data and repository as holotype.

**Distribution:** Nepal.

**Etymology:** The specific epithet refers to the type locality Nepal.

**Remarks:** The new species is similar to *Dolichopus ancistrus* Yang from Yunnan, China, in having the black antenna and hypandrium hook-like apically, but may be separated from the latter by the black fore coxa and hind femur without long ventral bristles. In *ancistrus*, the fore coxa is yellow, and the hind femur has long black ventral bristles (Yang, 1997).

### Genus *Allohercostomus* Yang, Saigusa and Masunaga, 2001

One species was known from Nepal: *Allohercostomus nepalensis* Yang, Saigusa and Masunaga, 2001. Here 1 new record species from Nepal is reported: *Allohercostomus rotundatus* (Yang and Saigusa, 1999).

#### *Allohercostomus rotundatus* (Yang and Saigusa, 1999)

*Hercostomus* (*Hercostomus*) *rotundatus* Yang and Saigusa, 1999. Bull. Inst. R. Sci. Nat. Belg. Ent. 69: 244. Type locality: Sichuan (Emei Mountain).

**Specimens Examined:** 4 males, **NEPAL:** Handurung (800 m) – Linba (1200 m), 1972. VI. 27, H. Makihara; 3 males, 1 female, **Nepal:** Jilikipthi (1850 m) – Pontak (1800 m), 1972. V. 13, H. Shima; 1 male, **Nepal:** Chiliwa (1350 m) – Shibku (2100 m), 1972. VI. 7, J. Emoto; 9 males, 3 females, **Nepal:** Lelep (1770 m), 1972. VI. 4, J. Emoto.

**Distribution:** Nepal, China (Sichuan, Shaanxi).

#### *Allohercostomus nepalensis* Yang, Saigusa and Masunaga, 2001

*Allohercostomus nepalensis* Yang, Saigusa and Masunaga, 2001. Ent. Sci. 4(2): 182. Type locality: Nepal (Topke Gola).

**Distribution:** Nepal.

### Genus *Phalacrosoma* Becker, 1922

The genus *Phalacrosoma* is recorded from Nepal for the first time with 1 species: *Phalacrosoma amoenum* Becker, 1922.

### *Phalacrosona amoenum* Becker, 1922

*Phalacrosona amoenum* Becker, 1922. *Capita Zool.* 1(4): 45. Type locality: Taiwan (Kosempo).

**Specimens Examined:** 2 males, 3 females, **Nepal:** Thudam (3500-3800 m), 1972. VI. 16, H. Shima; 1 male, **Nepal:** Lelep (1770 m), 1972. VI. 2, Y. Nishida; 1 male, **Nepal:** Chiliwa (1350 m), 1972. VI. 7, J. Emoto; 5 males, 3 females, **NEPAL:** Basantapur (2300 m), 1972. V. 29, H. Shima; 5 males, 1 female, **Nepal:** Dobham (800 m), 1972. V. 20, H. Shima; 2 males, 6 females, **Nepal:** Jilinkipthi (1850 m), 1972. V. 13, H. Shima.

**Distribution:** Nepal, China (Taiwan).

## DISCUSSION

The genus *Dolichopus* has two species in Nepal, of which the known species is distributed also in Central China and South China; the new species is close to the species from South West China. The genus *Allohercostomus* has two species in Nepal, of which one species is endemic and the other is distributed also in Central China. The genus *Phalacrosona* has only one species in Nepal which is distributed also in Taiwan of South China. The genus *Hercostomus* has 25 species in Nepal (Yang, Saigusa and Masunaga, 2002), of which 18 are endemic but the other 7 species are distributed also in Central China and South West China. Obviously, the fauna of the subfamily Dolichopodinae from Nepal has the close relationship with that of Central China, South West China, and South China.

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